

LEAD IN NEWARK, NJ DRINKING WATER

Issue:

On October 1, 2018, EPA received sampling results from its Office of Research and Development (ORD) indicating elevated lead levels in drinking water in two homes (148 and 399 ppb) in Newark, NJ. EPA immediately notified the New Jersey Department of Environmental Protection (NJDEP), as the state has primacy of Safe Drinking Water Act (SDWA) rules, including the Lead and Copper Rule (LCR). The elevated lead levels, as well as Newark Water Department's (NWD) recent elevated levels of haloacetic acids (HAA5), pose potential adverse impacts to public health and have received attention from the press.

Background:

- NWD is a public drinking water system serving over 270,000 people, many of whom have environmental justice concerns, and sells water to 8 consecutive systems.
- In 2016, in response to an EPA audit that found deficiencies in NJDEP's implementation of the LCR, NJDEP began implementing a corrective action plan that included evaluating large drinking water systems, such as NWD.
- As a result, in 2017 NWD collected LCR monitoring samples at new, Tier 1¹, locations, resulting in a lead action level exceedance (ALE; a lead level greater than 15 ppb).
- As required by the LCR after an ALE, NWD must develop a Corrosion Control Treatment (CCT) plan, for which NWD hired CDM Smith. CDM Smith collected the samples from the two homes and requested technical and analytical assistance from ORD.

Key Points:

- NWD has verified that the system has nearly 18,000 lead service lines (LSLs); approximately 5,600 lines are unknown (if LSL or not). LSLs are owned by homeowners, not NWD.
- As of December 31, 2018, NWD continues to exceed the lead action level. Elevated HAA5 levels were also reported for a second quarter.
- CCT modifications will need to consider simultaneous compliance with the LCR and the Stage 2 Disinfection Byproducts Rule (DBPR), to address elevated levels of lead and HAA5, respectively.
- When lead levels became elevated in NWD is unknown. It may be due to changes in the system's pH (NWD changed the system's pH from 8 to 7 in 2014/2015), or because NWD began sampling at Tier 1 locations, or some combination of the two.
- The City of Newark has distributed over 21,000 filters to residents and is conducting sampling in residences if requested by customers.

Talking Points:

- EPA has and will continue to provide technical assistance to NJDEP, such as reviewing CDM Smith's draft CCT plan for NWD and providing comments.
- EPA has been closely engaged with NJDEP as the state develops a plan to address NWD's drinking water concerns, as well as to evaluate the systems that purchase water from NWD.

¹ Tier 1 sites are single family structures with copper with lead solder constructed between 1983 and 1988, lead pipes including goosenecks and pigtails, or LSLs.

- EPA and NJDEP plan to conduct a joint assessment of NWD to assess SDWA compliance and identify any critical areas of concern.
- EPA will continue to assist NJDEP, as requested, in technical review and/or implementation of the LCR (e.g. compliance assistance, training).
- EPA will conduct public outreach and/or respond to public inquiries, as needed.
- EPA will continue to work with NJDEP on infrastructure funding opportunities, such as State Revolving Fund (SRF) monies for LSL replacement (see factsheet on Newark SRF).